: Architecture Assistantship/ Automobile Engineering./ Artificial Intelligence/ Agricultural Engineering/

Artificial Intelligence and Machine Learning/ Automation and Robotics/

Architecture/ Cloud Computing and Big Data/

Civil Engineering/ Chemical Engineering/ Computer Technology/ Computer

Engineering/

Civil & Rural Engineering/ Construction Technology/ Computer Science &

Engineering/ Fashion & Clothing Technology/

Dress Designing & Garment Manufacturing/ Digital Electronics/ Data Sciences/

Electrical Engineering/

Electronics & Tele-communication Engg./ Electrical Power System/ Electronics

& Communication Engg./ Electronics Engineering/

Food Technology/ Computer Hardware & Maintenance/ Hotel Management &

Catering Technology/ Instrumentation & Control/

Industrial Electronics/ Information Technology/ Computer Science &

Information Technology/ Instrumentation/

Interior Design & Decoration/Interior Design/Civil & Environmental

Engineering/ Mechanical Engineering/

Mechatronics/ Medical Laboratory Technology/ Medical Electronics/ Production

Engineering/

Printing Technology/ Polymer Technology/ Surface Coating Technology/ Textile

Technology/

Electronics & Computer Engg./ Travel and Tourism/ Textile Manufactures

: AA/ AE/ AI/ AL/ AN/ AO/ AT/ BD/ CE/ CH/ CM/ CO/ CR/ CS/ CW/ DC/ DD/

DE/

Programme Code

Programme

Name/s

DS/ EE/ EJ/ EP/ ET/ EX/ FC/ HA/ HM/ IC/ IE/ IF/ IH/ IS/ IX/ IZ/ LE/ ME/

MK/ ML/ MU/ PG/ PN/ PO/ SC/ TC/ TE/ TR/ TX

Semester : Second

Course Title : SOCIAL AND LIFE SKILLS

Course Code : 312003

I. RATIONALE

Rationale: Life skills can be defined as abilities that enable humans to deal effectively with the demands and challenges of life. Social skills are a subset of life skills that are needed for successful, healthy relationships to easily adapt when moving from one social situation to the next. They help regulate our emotions effectively and develop enduring, supportive relationships, we're happier and healthier. This is why developing life skills and eventually social skills is key not only to being successful in life, it's key for our health and well-being. Thus, Teaching of Social and life skills provide students with essentials of knowing, understanding attitudes, values, morals, social skills and better equip them to handle stress and build their self efficacy, self esteem and self confidence.

Note: The course offers five different alternatives (modules) for achieving above outcomes. Students must complete any one module from the following given options.

- a. MODULE-I: Unnat Maharashtra Abhiyan (UMA)
- b. MODULE-II: National Service Scheme (NSS)
- c. MODULE-III: Unniversal Human Values

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- d. MODULE-IV: Value Education (Unnati Foundation)
- e. MODULE-V: Financial Literacy (NABARD)

The institute can choose to offer any one MODULE to the groups of the students by taking into consideration the resources required and resources available in the institute. Different group of students maybe offered different MODULE based on their choices.

II. INDUSTRY / EMPLOYER EXPECTED OUTCOME

Exhibit psychosocial competencies, workplace ethics, resilience, positive attitude, integrity and self-confidence

III. COURSE LEVEL LEARNING OUTCOMES (COS)

Students will be able to achieve & demonstrate the following COs on completion of course based learning

- CO1 Develop ability to adapt to new challenges.
- CO2 Manage emotions effectively.
- CO3 Follow workplace ethics and practices
- CO4 Manage time Effectively.
- CO5 Increased self confidence to handle stress.

IV. TEACHING-LEARNING & ASSESSMENT SCHEME

				Learning Scheme				Assessment Scheme													
Course	Course		Course	Co	ctu onta s./W		7		G 114		A	The	ory		Ba		n LL L	&	Base S		
Code	Title	Abbr	Course Category/s				SLH	NLH	Credits							Prac	tical			- 1	Total Marks
				CL	TL	LL				Duration	FA- TH	SA- TH	To	tal	FA-	PR	SA-	-PR	SI		Marks
	-										Max	Max	Max	Min	Max	Min	Max	Min	Max	Min	
312003	SOCIAL AND LIFE SKILLS	SFS	VEC	,	-	-	2	2	1	-	-	-	-	- 18	1	-			50	20	50

Total IKS Hrs for Sem. : Hrs

Abbreviations: CL- ClassRoom Learning, TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA - Summative assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment

Legends: @ Internal Assessment, # External Assessment, *# On Line Examination , @\$ Internal Online Examination

Note:

- 1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.
- 2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
- 3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
- 4. Notional Learning hours for the semester are (CL+LL+TL+SL)hrs.* 15 Weeks
- 5. 1 credit is equivalent to 30 Notional hrs.
- 6. * Self learning hours shall not be reflected in the Time Table.
- 7. * Self learning includes micro project / assignment / other activities.

V. THEORY LEARNING OUTCOMES AND ALIGNED COURSE CONTENT

Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
	TLO 1.1 Explain developmental needs and connection of various stakeholders TLO 1.2 Enlist the local problems TLO 1.3 Design a methodology for fieldwork TLO 1.4 Select the attributes of engineering and social system for measurement, quantification, and documentation TLO 1.5 Measure & quantify the quantities / systems parameters TLO 1.6 Write a report using information collected tStudy the data collected from fieldwork and conclude the observations	Unit - I MODULE I: Activities Under Unnat Maharashtra Abhiyan (UMA) 1.1 Introduction to Societal Needs and respective stakeholders: Regional societal issues that need engineering intervention 1.2 Multidisciplinary approach-linkages of academia, society and technology 1.3 Stakeholders' involvement 1.4 Introduction to Important secondary data sets available such as census, district economic surveys, cropping pattern, rainfall data, road network data etc 1.5 Problem Outline and stakeholders: Importance of activity and connection with Mapping of system components and stakeholders (engineering / societal) 1.6 Key attributes of measurement 1.7 Various instruments used for data collection - survey templates, simple measuring equipments 1.8 Format for measurement of identified attributes/ survey form and piloting of the same 1.9 Fieldwork: Measurement and quantifications of local systems such as agriculture produce, rainfall, Road network, production in local industries, Produce /service which moves from A to B 1.10 Analysis and Report writing Report writing containing- 1. Introduction of the topic 2. Data collected in various formats such as table, pie chart, bar graph etc 3. Observations of field visits and data collected.	i) Field visit ii) Field work iii) Expert lectures

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Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.
2	TLO 2.1 Adoption of Village or Slum TLO 2.2 Survey and Problem Identification TLO 2.3 Conduct Project / Programs in the selected village / slum TLO 2.4 Undertake Special Camping Programme	Unit - II MODULE II: National Service Scheme (NSS) 2.1 Contacting Village/Area Leaders 2.2 Primary socio economic survey of few villages in the vicinity of the institute. 2.3 Selection of the village for adoption - conduct of activities 2.4 Comprehensive Socio Economic Survey of the Village/Area 2.5 Identification of Problem(s) 2.6 Dissemination of information about the latest developments in agriculture, watershed management, wastelands development, non-conventional energy, low cost housing, sanitation, nutrition and personal hygiene, schemes for skill development, income generation, government schemes, legal aid, consumer protection and allied fields. 2.7 A liaison between government and other development agencies for the implementation of various development schemes in the selected village / slum.	(i) Field visit (ii) Field work (iii) Expert lectures
3	TLO 3.1 Love and Compassion (Prem and Karuna) TLO 3.2 Truth (Satya) TLO 3.3 Non-Violence (Ahimsa) TLO 3.4 Righteousness (Dharma) TLO 3.5 Peace (Shanti) TLO 3.6 Service (Seva) TLO 3.7 Renunciation (Sacrifice) Tyaga TLO 3.8 Gender Equality and Sensitivity	Unit - III MODULE-III: Universal Human Values 3.1 Love and Compassion (Prem and Karuna): Introduction, Practicing Love and Compassion (Prem and Karuna) 3.2 Truth (Satya): Introduction, Practicing Truth (Satya) 3.3 Non-Violence (Ahimsa): Introduction, Practicing Non-Violence (Ahimsa) 3.4 Righteousness (Dharma): Introduction, Practicing Righteousness (Dharma) 3.5 Peace (Shanti): Introduction, Practicing Peace (Shanti) 3.6 Service (Seva): Introduction, Practicing Service (Seva) 3.7 Renunciation (Sacrifice) Tyaga: Introduction, Practicing Renunciation (Sacrifice) Tyaga 3.8 Gender Equality and Sensitivity: Introduction, Practicing Gender Equality and Sensitivity	i) Lectures ii) Demonstration iii) Case Study iv) Role Play v) Observations vi) Portfolio Writing vii) Simulation viii) Motivationa talks by Practitioners ix) Site/Industry Visit

Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.		
4	TLO 4.1 Puntuality	Unit - IV MODULE-IV: Value Education	i) Video		
1		(Unnati Foundation)	Demonstrations		
		4.1 Punctuality, Icebreaker and Simple Greeting,			
		Understanding & Managing Emotions, Introducing	ii) Flipped		
		Self, The power of a Positive Attitude, Talking	Classroom		
	TLO 4.2 Cleanliness,	about one's Family, Talking about one's Family,			
	Hygiene and Orderliness	Making a Positive Impression, Give word list for a	iii) Case Study		
		Word based			
		4.2 Cleanliness, Hygiene and Orderliness, Likes	iv) Role Play		
		and Dislikes, Developing Confidence in Self and			
	TLO 4.3 Responsibility	Others, Strengths and Weaknesses, Listening Skills,	v) Collaborative		
4.		Greeting gestures, Gender Equality and Sensitivity	learning		
		4.3 Responsibility, OCSEM- Visual Comprehension			
		and Word Based Learning, Goal Setting – Make it	vi) Cooperative		
	TLO 4.4 Gratitude and	happen, Follow, Like & Share Unnati Social Media	Learning		
	Appreciations	- Facebook / Instagram/ Twitter Introducing Others,			
		Time Management, Talking about the daily routine,	vii) Chalk-Boar		
		Money Management			
	TLO 4.5 Determination	4.4 Gratitude and Appreciation, Asking Simple			
	& Persistence	Questions & Asking for the price, Stress			
		Management, Student Referral process			
		,Comprehending & Paraphrasing Information, A			
	TLO 4.6 Respect	Plate of Rice and Dignity of Labour, Topics for			
		Public Speaking, Placement Process, OCSEM-E-			
		Newspaper, Critical Thinking to overcome			
		challenges			
		4.5 Determination and Persistence, Guiding and			
	TLO 4.7 Team Spirit	Giving Directions, Language Etiquette &			
		Mannerism, . Unnati Philosophy , b. Unnati			
		Branding - Follow, Like & Share Unnati Social			
- 1	TLO 4.8 Caring &	Media - Facebook / Instagram/ Twitter, Simple			
/	Sharing	instructions to follow procedures, Assertiveness,			
7		Give topics for Debate, Describing a			
		person/Objects, Refusal Skills, Word List for Word			
	TLO 4.9 Honesty	based Learning			
		4.6 Respect, Comparing, OCSEM - Public	1 4		
		Speaking, Student referral process, Attending a	A And		
	TLO 4.10 Forgive and	phone call, Being a Good Team Player, Placement			
	Forget	Process, At a Restaurant, Workplace ethics			
		4.7 Team Spirit, Inviting someone, OCSEM -			
		Picture Reading & Word, a. Unnati Philosophy & b.	//0		
		Unnati Branding - Follow, Like & Share Unnati	0.00		
		Social Media - Facebook / Instagram/ Twitter,	1 -		
		Apologizing, Apologizing, Dealing effectively with			
		Criticism, Introduce Importance of Self Learning			
		and upskilling	1 (0)		
			/		

Sr.No	Theory Learning Outcomes (TLO's)aligned to CO's.	Learning content mapped with Theory Learning Outcomes (TLO's) and CO's.	Suggested Learning Pedagogies.	
		4.8 Caring and Sharing, Handling Customer queries, Flexibility & Adaptibility, Student referral process, Writing a Resume, OCSEM-Public Speaking, Placement Process, Meditation/ Affirmation & OCSEM-Debate, Introduce Certif-ID, how to create Certif-ID Project, 4.9 Honesty, Email etiquette & Official Email communication, Alcohol & Substance use & abuse, Describing a known place, Leadership Skills, Describing an event, OSCEM-Picture Reading & Visual Comprehension 4.10 Forgive and Forget, Facing and Interview, OSCEM-Public Speaking, Attending a telephonic/Video interview & Mock Interview, Affirmation, Pat-a-Back & Closure (Valediction, Unnati Branding, Student Testimonials), Meditation/ Affirmation & Sponsor connect (Speak to UNXT HO)		
5	TLO 5.1 Literacy About Savings and Investments TLO 5.2 Literacy About Financial Planning TLO 5.3 Literacy About Transactions TLO 5.4 Literacy About Income, expenditure and budgeting TLO 5.5 Literacy About Inflation TLO 5.6 Literacy About Loans TLO 5.7 Literacy About the Importance of Insurance TLO 5.8 Literacy About the Dos and Donts in	Unit - V MODULE-V: Financial Literacy 5.1 Introduction - Life Goals and financial goals 5.2 Savings and Investments - Three pillars of investments, Popular asset classes, Government schemes, Mutual Funds, Securities markets (Shares and bonds), Gold, Real Estate, Do's and Don'ts of investments 5.3 Retirement planning 5.4 Cashless transactions 5.5 Income, expenditure and budgeting – Concepts and Importance 5.6 Inflation- Concept, effect on financial planning of an individual 5.7 Loans – Types, Management of loans, Tax benefits 5.8 Insurance – Types, Advantages, selection 5.9 Dos and Donts in Financial planning and Transactions	i) Online/Offline Mode of Instructions ii) Video Demonstrations iii) Presentations iv) Case Study v) Chalk-Board vi) Collaborative learning	

VI. LABORATORY LEARNING OUTCOME AND ALIGNED PRACTICAL / TUTORIAL EXPERIENCES: NOT APPLICABLE.

VII. SUGGESTED MICRO PROJECT / ASSIGNMENT/ ACTIVITIES FOR SPECIFIC LEARNING / SKILLS DEVELOPMENT (SELF LEARNING)

Suggestive list of activities during Regular as well as Special Camping (NSS Activities)

finances

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- Following list is only an illustrative list of the type of activities that can be undertaken. Under the programme it would be open to each NSS Unit to undertake one of these programmes or any other activity which may seem desirable to them according to local needs. The NSS Unit should aim at the integrated development of the area selected for its operation which could be a village or a slum. It has also to be ensured that at least a part of the programme does involve manual work.
- (a) Environment Enrichment and Conservation:
- The activities under this sub-theme would inter-alia, include:
- (i) plantation of trees, their preservation and upkeep
- (ii) Construction & maintenance of village streets, drains
- (iii) Cleaning of village ponds and wells;
- (iv) Popularization and construction of Gobar Gas Plants, use of non-conventional energy;
- (v) Disposal of garbage & composting;
- (vi) Prevention of soil erosion and work for soil conservation,
- (vii) Watershed management and wasteland development
- (viii) Preservation and upkeep of monuments, and creation of consciousness about the preservation of cultural heritage among the community.
- (b) Health, Family Welfare and Nutrition Programme:
- (i) Programme of mass immunization;
- (ii) Working with people in nutrition programmes with the help of Home Science and medical college students;
- (iii) Provision of safe and clean drinking water;
- (iv) Integrated child development programmes;
- (v) Health education, AIDS Awareness and preliminary health care.
- (vi) Population education and family welfare programme;
- (vii) Lifestyle education centres and counselling centres.
- © Programmes aimed at creating an awareness for improvement of the status of women: (i) programmes of educating people and making them aware of women's rights both constitutional and legal;
- (ii) creating consciousness among women that they too contributed to economic and social well-being of the community;
- (iii) creating awareness among women that there is no occupation or vocation which is not open to them provided they acquire the requisite skills; and
- (iv) imparting training to women in sewing, embroidery, knitting and other skills wherever possible.
- (d) Social Service Programmes:
- (i) work in hospitals, for example, serving as ward visitors to cheer the patients, help the patients, arranging occupational or hobby activities for long term patients; guidance service for out-door-patients including guiding visitors about hospital's procedures, letter writing and reading for the patients admitted in the hospital; follow up of patients discharged from the hospital by making home visits and places of work, assistance in running dispensaries etc.
- (ii) work with the organisations of child welfare;
- (iii) work in institutions meant for physically and mentally handicapped;
- (iv) organising blood donation, eye pledge programmes;
- (v) work in Cheshire homes, orphanages, homes for the aged etc.;
- (vi) work in welfare organisations of women;
- (vii) prevention of slums through social education and community action;

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- (e) Production Oriented Programmes:
- (i) working with people and explaining and teaching improved agricultural practices;
- (ii) rodent control land pest control practices;
- (iii) weed control;
- (iv) soil-testing, soil health care and soil conservation;
- (v) assistance in repair of agriculture machinery;
- (vi) work for the promotion and strengthening of cooperative societies in villages;
- (vii) assistance and guidance in poultry farming, animal husbandry, care of animal health etc.;
- (viii) popularisation of small savings and assistance in procuring bank loans
- (f) Relief & Rehabilitation work during Natural Calamities:
- (i) assisting the authorities in distribution of rations, medicine, clothes etc.;
- (ii) assisting the health authorities in inoculation and immunisation, supply of medicine etc.;
- (iii) working with the local people in reconstruction of their huts, cleaning of wells, building roads etc.;
- (iv) assisting and working with local authorities in relief and rescue operation;
- (v) collection of clothes and other materials, and sending the same to the affected areas;
- (g) Education and Recreations: Activities in this field could include:
- (i) adult education (short-duration programmes);
- (ii) pre-school education programmes;
- (iii) programmes of continuing education of school drop outs, remedial coaching of students from weaker sections;
- (iv) work in crèches;
- (v) participatory cultural and recreation programmes for the community including the use of mass media for instruction and recreation, programmes of community singing, dancing etc.;
- (vi) organisation of youth clubs, rural land indigenous sports in collaboration with Nehru Yuva Kendras;
- (vii) programmes including discussions on eradications of social evils like communalism, castism, regionalism, untouchability, drug abuse etc.;
- (viii) non- formal education for rural youth and
- (ix) legal literacy, consumer awareness.

VIII. LABORATORY EQUIPMENT / INSTRUMENTS / TOOLS / SOFTWARE REQUIRED

Sr.No	Equipment Name with Broad Specifications	Relevant LLO Number
1	Simple engineering measurement devices GPS data collection tools GIS open source softwares- Google Earth and QGIS MS office suite	All

IX. SUGGESTED WEIGHTAGE TO LEARNING EFFORTS & ASSESSMENT PURPOSE (Specification Table): NOT APPLICABLE

X. ASSESSMENT METHODOLOGIES/TOOLS

Formative assessment (Assessment for Learning)

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Course Code: 312003

• Formative assessment (Assessment for Learning) Report and presentation of fieldwork activities, Self-Learning (Assignment)

Summative Assessment (Assessment of Learning)

XI. SUGGESTED COS - POS MATRIX FORM: NOT APPLICABLE

XII. SUGGESTED LEARNING MATERIALS / BOOKS

Sr.No	Author	Title	Publisher with ISBN Number
1	IRAP, Hyderabad, CTARA, IIT Bombay and UNICEF, Mumbai	Compendium of Training Materials for the Capacity Building of the Faculty and Students of Engineering Colleges on 'IMPROVING THE PERFORMANCE OF RURAL WATER SUPPLY AND SANITATION SECTOR IN MAHARASHTRA' Districts Economic survey reports	UNICEF
2	Central Public Health and Environmental Engineering Organisation	Manual on Water Supply and Treatment	Ministry of Urban Development, New Delhi
3	Specifications And Standards Committee	Indian Standards (IS) Codes and Indian Roads Congress (IRC) Codes	Bureau of Indian Standards and The Indian Road Congress
4	Prepared by each district administration	Districts Economic survey reports	Govt. of Maharashtra
5	Local college students, UMA staffs	Sample Case Studies on UMA website	IITB-UMA team

XIII. LEARNING WEBSITES & PORTALS

Sr.No	Link / Portal	Description
1	https://gr.maharashtra.gov.in/Site/Upload/Government%20Resol utions/English/201601131501523808.pdf	Government Resolution of Government of Maharashtra regarding Unnat Maharashtra Abhiyan
2	https://gr.maharashtra.gov.in/Site/Upload/Government%20Resolutions/English/201606151454073708.pdf	Government Resolution of Government of Maharashtra regarding Unnat Maharashtra Abhiyan Guidelines
3	https://censusindia.gov.in/census.website/	A Website of Census of India
4	https://gsda.maharashtra.gov.in/english/	A Website of Groundwater Survey and Development Agency, GoM

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Sr.No	Link / Portal	Description
5	https://mrsac.gov.in/MRSAC/map/map	A Website where district-wise maps showcasing different attributes developed by Maharashtra Remote Sensing Applications Centre.
6	https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx	A Website of Jal Jivan Mission, Government of India
7	https://cpcb.nic.in/	A Website of Central Pollution Control Board, Government of India
8	http://www.mahapwd.com/#	A Website of Public Works Department, GoM
9	http://tutorial.communitygis.net/	A Website for GIS data sets developed by Unnat Maharashtra Abhiyan
10	https://youtu.be/G71maumVZ1A?si=TzDTxKUpLYaRos7U	A video record of lecture by Prof. Milind Sohoni, IIT Bombay, on Engineering, Development and Society
11	https://youtu.be/TUcPNwtdKyE?si=wnSWrhGc9dJTC-ac	A keynote talk by Prof. Milind Sohoni, IIT Bombay, on Interdisciplinary Engineering: The Road Ahead
12	https://youtu.be/mKJj6j_1gWg?si=ajE8s4lfB2OM63Ng	A TED talk by Prof. Milind Sohoni, IIT Bombay, on Vernacular Science: The Science of Delivery
13	https://www.ugc.gov.in/pdfnews/4371304_LifeSKill_JeevanKaushal_2023.pdf	UHV: UGC Course on life skils. Unit 4 i.e. Course 4 is to be referred
14	https://nss.gov.in/	NSS: Know about the NSS Scheme and details

MSBTE Approval Dt. 29/11/2023

Semester - 2, K Scheme